



Indian Health Service
**Tribal Caucus Briefing on the IHS
Special Diabetes Program for Indians**

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Special Diabetes Program for Indians Update

by

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Good afternoon. I am Dr. Yvette Roubideaux, Director of the Indian Health Service (IHS). I appreciate this opportunity to speak about the successful things we are doing to treat and prevent diabetes in the American Indian and Alaska Native communities we serve.

Since 1998, the IHS Special Diabetes Program for Indians (SDPI) funding has enabled American Indian and Alaska Native communities to dramatically increase access to quality diabetes programs that are associated with measurable clinical outcomes. This program has changed the diabetes landscape across the Indian health system.

The SDPI serves an urgent need in Indian Country, since American Indians and Alaska Natives have the highest age-adjusted rate of diagnosed diabetes among all racial and ethnic groups in the United States—roughly twice the rate of the general population. And the diabetes-related mortality rate for American Indians and Alaska Natives is nearly three times that of the general population. In some communities, more than half of adults ages 18 and older have diabetes, with prevalence rates reaching as high as 60 percent.

Once exclusively a disease of adults, type 2 diabetes is also increasingly common among Native youth, threatening the health, well-being, and quality of life of future generations.

Diabetes prevention efforts are an urgent IHS priority, as well as diabetes treatment and management to prevent complications.

In response to the diabetes epidemic among American Indian and Alaska Native people, Congress established the SDPI in the balanced Budget Act of 1997. The Act provided \$150 million over 5 years for “the prevention and treatment of diabetes in American Indians and

The text is the basis of Dr. Roubideaux’s oral remarks at the Tribal Caucus Briefing on the Special Diabetes Program for Indians on March 7, 2012. It should be used with the understanding that some material may have been added or omitted during presentation.

Alaska Natives.” Funds have been reauthorized at \$150 million per year through fiscal year 2013.

The SDPI currently provides grants for 404 diabetes treatment and prevention programs in IHS, tribal, and urban Indian health programs in 35 states across the Indian health system. The programs include 338 community-driven programs and 66 diabetes prevention and healthy heart initiatives.

The 338 community-directed diabetes programs are implementing diabetes treatment and prevention programs based on scientifically proven Best Practices. These programs are designed to address local community priorities, and each grant program has used their funding for activities that address specific needs in their communities. These programs have dramatically increased access to services such as:

- Diabetes clinics, teams, and registries;
- Weight loss programs for adults and youth;
- Infrastructure to promote physical activity; and
- Access to experts in nutrition and physical activity.

The IHS Division of Diabetes Treatment and Prevention has evaluated these programs, and tracks their progress through grant program data and the annual IHS Diabetes Care and Outcomes Audit.

Sixty-six of the Demonstration Projects have successfully completed a 6-year program translating the results of diabetes prevention and cardiovascular disease risk reduction research into diverse, real world Indian health settings. They worked together as a collaborative, using peer-to-peer learning to help each other and to design the program, and participated in an intensive evaluation of their work.

The results are incredible – you would expect that a translational effort would only achieve about 40 percent of the results of a randomized controlled research trial. However, our 36 Diabetes Prevention projects successfully achieved the same level of weight loss as an original Diabetes Prevention Program Research study funded by the National Institutes of Health (NIH). In doing so, they prevented onset of diabetes in high-risk American Indian and Alaska Native people at a rate similar to the NIH study.

And the 30 programs in the Healthy Heart Initiative achieved significant decreases in cardiovascular disease risk factors in people with diabetes through intensive case management and a team approach to care. As a result of their work, we now know that it is possible to reduce risk factors for diabetes and cardiovascular disease in American Indian and Alaska Native communities.

The Demonstration projects have been successfully transitioned to the Diabetes Prevention and Healthy Heart Initiatives in the last two years to continue implementing their successful programs. They are documenting activities and outcomes and disseminating information and best practices from the original Demonstration Projects.

The goal is to have all SDPI programs learn about the successful activities of the demonstration projects and to share materials and resources throughout Indian country (and the rest of the world!).

In November, I attended the Special Diabetes Program for Indians Diabetes Prevention and Healthy Heart Initiatives Meeting in Albuquerque, New Mexico. I viewed posters from each of the grant programs that documented their successful prevention activities through photos,

activity summaries, and client testimonials. It was very inspiring to see the creativity, innovation, enthusiasm, and expertise of our grant program activities.

The overall data, while it shows great results, doesn't even tell half of the story. The real story about these programs is in the community and patient level achievements – those are the stories you know and can tell.

A tribal leader met Secretary Sebelius yesterday and told her how he had lost 100 pounds as a result of the SDPI. That's the best evidence we have that these programs are working – when you see the impact on individual patients. Statistics and graphs cannot tell that story.

However, we do have the data, as this chart shows:

Increased Access to Diabetes Treatment and Prevention Services		
	1997 Baseline*	2010
Diabetes clinics	31%	71%
Diabetes clinical teams	30%	94%
Diabetes patient registries	34%	94%
Nutrition services for adults	39%	89%
Access to registered dietitians	37%	77%
Culturally tailored diabetes education programs	36%	99%
Access to physical activity specialists	8%	74%
Adult weight management programs	19%	76%

*Before SDPI funding was available

The Special Diabetes Program for Indians has resulted in 13 years of successful interventions through increased access to diabetes treatment and prevention services. Based on local needs and priorities, the SDPI grant programs has implemented proven interventions to address the diabetes epidemic, often where few resources existed before.

As access to diabetes services increased, diabetes health outcomes improved significantly in American Indian and Alaska Native communities. Clinical improvements in blood sugar, LDL cholesterol, and blood pressure control, combined with the use of Angiotensin Converting Enzyme (ACE) inhibitors and Angiotensin II Receptor Blockers (ARBs), have had a tremendous impact on reducing rates of diabetes complications since the inception of the SDPI.

One of the most important improvements has been a 13.7 percent decrease in the mean blood sugar level of American Indians and Alaska Natives with diagnosed diabetes, a major achievement over 15 years. The average blood sugar level decreased from 9 percent in 1996 to 8 percent in 2011, as measured by the A1C test. Decreases of this magnitude translate to an almost 40 percent reduction in diabetes-related complications.

Average LDL cholesterol has declined from 118 mg/dL in 1998 to 94 mg/dL in 2011. Improved control of LDL cholesterol can reduce cardiovascular complications by 20-50 percent.

Blood pressure has also been well-controlled throughout the SDPI era. Our original goal was <130/80 mmHg, and the average blood pressure in 2011 was 131/75 mmHg. Blood pressure control reduces the risk of cardiovascular disease among people with diabetes by 33-50 percent and reduces the risk of eye, kidney, and nerve complications by about 33 percent. Lowering blood pressure in patients with early diabetic kidney disease can reduce the decline in their kidney function by 30-70 percent.

Use of blood pressure-lowering medications increased from 42 percent in 1997 to 72 percent in 2011. Treatment with ACE inhibitors and ARBs has shown to be more effective in reducing the decline in kidney function than has treatment with other blood pressure-lowering medications.

The successful clinical outcomes of the Special Diabetes Program for Indians have also helped IHS meet all of its applicable Government Performance Results Act measurement goals for diabetes in FY 2011.

The most important impact of these combined and sustained clinical improvements is seen in the dramatic drop in the rate of end stage renal disease (ESRD) in American Indian and Alaska Native people with diabetes when compared with other racial and ethnic groups in the U.S. Between 1995 and 2006, the incident rate of ESRD in American Indian and Alaska Native people with diabetes fell by 27.7 percent – a greater decline than for any other racial or ethnic group.

Given that Medicare costs per year for one patient on hemodialysis were \$82,285 in 2009, this reduction in new cases of ESRD means a decrease in the number of patients requiring dialysis—translating into millions of dollars in cost savings for Medicare, IHS, and other third-party payers.

The SDPI is continuing its successful activities. They have shown that in partnership with our communities, we can reduce diabetes and cardiovascular disease risk factors in Indian country with innovative and culturally appropriate activities.

The IHS is working to strengthen its diabetes infrastructure at the Headquarters and Area office levels to maintain and improve diabetes surveillance, technical assistance, provider networks, and clinical monitoring.

In addition, the IHS Area Diabetes Consultants provide technical support to diabetes programs in their respective Areas by supporting culturally sensitive and focused prevention and treatment programs. A rigorous evaluation model for the SDPI has also been developed.

The SDPI grant programs, now with more than 13 years of experience, have successfully implemented diabetes interventions that have significantly improved clinical outcomes for American Indian and Alaska Native people. As Congress envisioned, SDPI funding has enabled the Indian health system to make tremendous changes in the diabetes landscape in American Indian and Alaska Native communities.

Overall, we have accomplished a great deal – and still have much more work to do. We are grateful to all the staff members who have helped make it a success.

And we certainly hope this program will continue for many years. However, as you know, these are difficult budget times, and the SDPI reauthorization currently only lasts through 2013. Yet despite the past and future challenges, we have a great story to tell.

Thank you for your partnership in this successful program.